

2. Approach to EIA

Introduction

- 2.1 This Chapter sets out the approach and methodology that has been undertaken to complete the assessment of the likely significant environmental effects of the Proposed Scheme as described in **Chapter 4: Development Specification** and supporting plans (which are listed below).
- 2.2 This Chapter sets out the following:
- Adoption and application of best practice within the EIA process;
 - Scope of the EIA, including a summary of the EIA Scoping process and the technical topics ‘scoped in’ and ‘scoped out’ of the EIA and this ES;
 - Stakeholder engagement, summarising the level of engagement with statutory and non-statutory consultees and other forms of engagement; and
 - Approach to the assessment of likely significant effects, specifically covering: approach to boundaries; baseline conditions; future baseline; identification of sensitive receptors; information to inform assessment; assessment scenarios; implementation of mitigation and monitoring; approach to determining the level of effect and significance; as well as limitations and assumptions.

Adoption of Best Practice

- 2.3 As confirmed within **Chapter 1: Introduction**, this ES meets the requirements set out in Regulation 18, Paragraphs 3 – 4 and Schedule 4 of the EIA Regulations¹. In addition, the EIA (and therefore the ES) has been undertaken with due consideration of the following guidance documents:
- Ministry of Housing, Communities and Local Government (MHCLG), Planning Practice Guidance (PPG)²;
 - Institute of Environmental Management and Assessment (IEMA), EIA Guide to Shaping Quality Development³; and
 - IEMA, EIA Guide to Delivery Quality Development⁴.

Scope of the EIA

Overview of the EIA Scoping Process

- 2.4 As set out in **Chapter 1: Introduction**, in accordance with Regulation 15, Paragraph 1 of the EIA Regulations, a request for a Scoping Opinion supported by an EIA Scoping Report (**Appendix 2.1**) was submitted to CDC on 2nd November 2022.
- 2.5 In response, CDC provided a Scoping Opinion on 7th December 2022 (**Appendix 2.2**), supported by technical responses from consultees (both statutory and non-statutory).

- 2.6 Where additional information or clarification was requested as part of the EIA Scoping Opinion (**Appendix 2.2**), **Table 2.1** summarises the comments received and how these have been addressed within the ES. Full details of all comments received can be found in **Appendix 2.2**.
- 2.7 As set out in **Table 2.1**, the scope of Approved Projects for consideration in relation to in-combination effects was expanded to include three additional projects. The full list of Approved Projects can be found in **Chapter 8: Assessment of Cumulative Effects**.

Table 2.1: Summary of EIA Scoping Opinion Comments and Responses

Consultee	Summary of Scoping Comment	How / Where the Comment Has Been Addressed
Thames Water	<p><i>'The EIA Regulation 2017 set out in Schedule 4 that water and wastewater issues may need to be covered in an EIA. Thames Water considers that the following should be considered:</i></p> <ul style="list-style-type: none"> <i>• The development's demand for Sewerage Treatment and network infrastructure both on and off site and whether it can be met;</i> <i>• The surface water drainage requirements and flood risk of the development both on and off the site and whether it can be met;</i> <i>• The development demand for water supply and network infrastructure both on and off the site and whether it can be met;</i> <i>• Build-out/phasing details to ensure the infrastructure can be delivered ahead of occupation;</i> <i>• Any piling methodology and will it adversely affect neighbouring utility services.</i> <p><i>Information to support the EIA can be obtained from the Thames Water website.'</i></p>	<p>Pre-application consultation has been undertaken with Thames Water (TW) to confirm that sufficient sewerage capacity in the Site's adjacent foul water sewer network is available to accommodate the Proposed Scheme.</p> <p>Further consultation has been undertaken with TW, the Environment Agency (EA) and the Lead Local Flood Authority (LLFA) to confirm that TW's other considerations have been accounted for, including confirmation that foul water discharge from the Proposed Scheme can be accommodated by TW's network.</p> <p>Further detail on these matters is provided in the Flood Risk Assessment submitted in support of the Application, which does not report any likely significant effects.</p>
Natural England (NE)	<p><i>'The proposal is unlikely to adversely impact any European or internationally designated nature conservation sites (including 'habitat sites' under the NPPF) or nationally designated sites (SSSI, National Nature Reserves or Marine Conservation Zones). The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. [...] The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider ecological networks.</i></p>	<p>NE have provided a standardised response relating to all sites, suggesting that the application should assess potential impacts on designated sites, habitats and species.</p> <p>Nevertheless, the ES clearly sets out measures adopted to enhance ecological connectivity across the Proposed Scheme in Chapter 4: Development Specification and Volume 3: Environmental Management Plan.</p>

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Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT)	<p><i>'The proposed development has the potential for adverse effects on Fishponds Wood Local Wildlife Site, which is 0.38km northeast of the proposed site. The EIA should include results of appropriate surveys, an assessment of impact on Fishponds Wood Local Wildlife Site, details of mitigation, compensation and enhancement measures. These must deal with potential impacts on both nationally and locally designated sites and how these will be avoided and, if they cannot be avoided, how benefits of the development in the location proposed outweigh both its likely impact on the features of the designated site, and how these impacts will be mitigated.'</i></p>	<p>Furthermore, the rationale for scoping these effects out of the EIA is set out within the EIA Scoping Report (Appendix 2.1). This states that <i>'Neithrop Fields Cutting SSSI is the only statutory designated site situated within 10km of the Site. Due to it being designated for its geological rather than ecological interest, despite its proximity to the Site (800m south), neither the construction nor operation of the Proposed Scheme is likely to cause damage or degradation to it.'</i></p> <p>Further commentary regarding local wildlife sites is provided below.</p> <hr/> <p>Justification for the scoping out of effects relating to Fishponds Wood Hanwell OWLS is provided in the EIA Scoping Report (Appendix 2.1), which states that <i>'given the spatial separation from the Site it is considered unlikely that there would be any direct impact on the OLWS as a result of the Proposed Scheme. Indirect pollution impacts are also considered unlikely given the separation and the lack of receptor pathways [...].'</i></p> <p>Despite this, standard pollution prevention measures would be established during construction to further prevent any potential adverse impacts arising from excessive dust, light or impacts on the local hydrological system.</p> <p>Indirect impacts caused by recreational pressure were also discounted as <i>'the ponds themselves are not accessible [... and] the woodland is considered to</i></p>

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		<p><i>represent a robust habitat, resilient to such minor increase in recreational pressure and is not considered likely to be adversely affected by residents of the Proposed Scheme.'</i></p> <p>Only a single well marked footpath crosses through the narrowest portion of the OWLS with the vast majority retained as inaccessible. Furthermore, the Proposed Scheme will include up to 7.1ha of public open space (as detailed in Chapter 4: Development Specification) which will deter future residents from visiting and pressuring these habitats.</p>
	<p><i>'In terms of impact on water channel, priority habitat and protected and priority species, an unnamed channel lies just to the east of the site, which appears to feed into a pond in the village of Hanwell. The EIA must fully assess whether the proposed development is likely to have any adverse impact on the water channel. This will need to include an assessment of possible impacts, and a detailed description of mitigation measures that will be carried out and how they will ensure there will be no impact.'</i></p>	<p>The watercourse appears to flow from the pond in the village of Hanwell through the unnamed channel, feeding into Hanwell Brook to the southeast. The water channel is spatially separated from the development zones of the Proposed Scheme by at least 400m of farmland at its closest point. The topography of the Site is fairly flat, with limited potential for run-off from the Site reaching the watercourse directly.</p> <p>During construction, measures to prevent the pollution of the water channel will include specific working methods/practices and monitoring requirements to minimise the risk of detrimental effects on water quality in line with the Pollution Prevention Guidance and CIRIA 'Control of water pollution from construction sites'¹. Such</p>

¹ CIRIA (2001) Control of water pollution from construction sites. Guidance for consultants and contractors (C532).

Consultee	Summary of Scoping Comment	How / Where the Comment Has Been Addressed
	<p><i>'The site lies in close proximity to deciduous woodland/hedgerow and is thus highly likely to be used by a variety of bat species for commuting and foraging. Appropriate bat surveys will be needed, and any form of lighting would be of serious concern with respect to impact on bats in particular, and other forms of wildlife, particularly bearing in mind the proximity to woodland. This matter must be addressed in the EIA.'</i></p>	<p>measures include the washing down of equipment and use of sediment traps on surface water drains.</p> <p>Once completed, the Proposed Scheme will include new contained surface water drainage infrastructure that will seek to prevent uncontrolled surface water run-off, including SuDS and treatment drains. Surface water will be discharged via infiltration from the SuDS at greenfield runoff rates.</p> <hr/> <p>As discussed in the EIA Scoping Report (Appendix 2.1) and its Appendix 6, the Ecological Appraisal², bat roosting and foraging/commuting activity surveys were undertaken at the Site to inform the scope of effects relating to bats.</p> <p>Only nine trees located within the Site are considered to have low to moderate potential to support roosting bats. Constituting primary mitigation, all of these trees will be retained and buffered within the Site. In addition, a range of new bat roosting features will be incorporated into new dwellings or installed on retained mature trees to further enhance the availability of roosting opportunities for bats (Chapter 4: Development Specification and Volume 3: Environmental Management Plan).</p> <p>Bat activity surveys identified a population of bats considered to be of local-level ecological value based on the number of registrations and the assemblage of</p>

² EDP (2022). Land East of Warwick Road, Banbury: Ecological Appraisal. October 2022.

species present. Given this, the Proposed Scheme has sought to retain the existing boundary habitats with only a minor loss of hedgerow from the western boundary of Parcel A, required for access. The Proposed Scheme includes substantial areas of proposed planting, with wide areas of tree planting along the Site boundaries to enhance the existing defunct hedgerows and with large areas of wildflower grassland within areas of open space. In total, the Proposed Scheme will include approximately 1.33ha of new planting (**Chapter 4: Development Specification**), resulting in no loss of connectivity and a marked enhancement of on-Site habitats for a variety of fauna. Furthermore, the outline Biodiversity Impact Assessment (BIA) undertaken for the Proposed Scheme (Appendix 6 of the **Ecological Appraisal** submitted in support of the Application) illustrates a net gain in biodiversity habitat units of 39.90%.

In relation to lighting, as set out in the EIA Scoping Report (**Appendix 2.1**) and **Chapter 4: Development Specification**, and committed to in **Volume 3: Environmental Management Plan**, a bat-sensitive Lighting Strategy will be developed with reference to Guidance Note 08/18 Bats and Artificial lighting in the UK ILP 2018 in order to maintain their dark corridor habitat. Such measures include the use of horizontal cut-off optics, zero tilts and the direction of main beam below the angle of 85°, informed by the Lighting Impact Assessment submitted in support of the Application.

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	<p><i>'The site consists of an arable field surrounded by hedgerows/woodland in an area that supports a rich variety of farmland bird populations, including priority species. Detailed breeding and wintering bird surveys and appropriate mitigation proposals will therefore be required. Depending on the outcome of breeding and wintering bird surveys, then with respect to any priority species impacted, off-site compensation will be needed unless it can be proved that the habitats provided on-site will be sufficient to maintain or enhance the same population of these species. On-site provision would be difficult or impossible for birds such as Lapwing, Golden Plover, Skylark and some other priority species unless large areas of the site were set aside as undisturbed habitat. It would not be acceptable to suggest that there is suitable habitat elsewhere for priority farmland species, since the territories in these areas would already be occupied, and this would be contrary to ecological theory of carrying capacity.'</i></p>	<p>As a result of the above, no significant effects to bats have been identified, and therefore, these have been scoped out of the ES.</p> <hr/> <p>As discussed in the EIA Scoping Report (Appendix 2.1) and its Appendix 6, the Ecological Appraisal, breeding bird surveys were undertaken at the Site to inform the scope of effects relating to them. In these surveys, no Lapwing or Golden Plover were recorded during the surveys and whilst skylarks were recorded, as stated in the EIA Scoping Report (Appendix 2.1), <i>'The suitability of the Site to support skylark is likely to vary from year to year, depending on the cropping regime, with some crops of greater value than others and as such, it is likely that usage of the Site naturally varies [...] the loss of one small field from this habitat is not considered likely to substantially reduce their available habitat, as small numbers can be readily accommodated within the field to the east of the Site, in which only one skylark territory was recorded and which likely has capacity to support more territories.'</i></p> <p>As such, off-Site compensation is not considered necessary to support this population of breeding birds, and effects to them will not be significant and have been scoped out of the ES.</p>
	<p><i>'Hedgerows should be retained and enhanced. In exceptional circumstances, if proposals involve removal of small sections of hedgerow for access purposes, then a substantially longer section of hedgerow</i></p>	<p>As described in the EIA Scoping Report and detailed further within Chapter 4: Development Specification, hedgerows have been retained and will be unaffected by</p>

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	<p><i>should be planted elsewhere on site to provide compensation. A management regime should be put in place for hedgerows across the site including a three-year rotation for trimming and allowing some stretches of hedgerow to remain untrimmed for longer. There should also be at least 15m buffers between any development and the hedgerows. These buffers should be maintained as dark corridors and should be of appropriate semi-natural priority habitat such as a mosaic of scrub and species-rich grassland.'</i></p>	<p>the Proposed Scheme across the majority of the Site, with only minor losses associated with the construction of the new Site access from Warwick Road (B4100). The remaining existing hedgerows are generally in degraded condition, with gaps frequently recorded. To compensate for this loss, the remaining hedgerows will be enhanced and new hedgerows planted throughout the Proposed Scheme. The outline BIA illustrates a net gain in hedgerow habitat units of 10.83%.</p> <p>The new and retained hedgerows will be incorporated into a landscape and ecology management plan which will provide advice for the maintenance of hedgerows to establish a good structure and to enhance their value for wildlife (Volume 3: Environmental Management Plan). This would include advice for rotational cutting.</p> <p>Belts of green open space will be incorporated around the peripheries of the Proposed Scheme to maintain corridors for wildlife movement. Planting within these areas will include a range of native trees, shrubs and grasslands. These buffer zones will be designed with reference to arboricultural best practice for avoidance of root protection areas.</p> <p>As above, a bat-sensitive lighting strategy will be devised to retain dark corridors along the retained boundary vegetation.</p> <p>15m is the offset required for ancient woodland and whist the preference is to retain and buffer the</p>

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		<p>hedgerows there is no guidance that requires this extent of buffer.</p>
	<p><i>'A biodiversity net gain is required, and the EIA must detail significant habitat creation in order to compensate for the impact of the development on habitats and in order to achieve a net gain, and should be calculated using the latest biodiversity accounting metric published by Natural England. All calculations should be provided with the documentation available to consultees as part of any subsequent planning application submission.'</i></p>	<p>The delivery of biodiversity net gain is a policy requirement and so falls outside of the remit of EIA/the ES.</p> <p>Nevertheless, a BIA has been completed using the DEFRA 3.1 metric which illustrates that the Proposed Scheme is capable of delivering a marked net gain in habitat units of 10.04 (39.90%) and hedgerow units of 1.10 (10.83%) and as such would exceed current policy requirements for biodiversity net gain.</p>
	<p><i>'The introduction of lighting into this rural edge, could potentially impact upon a wide range of species, in particular on bats and birds. Paragraph 5.157 of the Scoping Report is noted. It is essential that proposals include a lighting management plan to demonstrate how lighting will be avoided or otherwise minimised during both construction and operational phases. There should be a presumption against lighting wherever possible. If lighting of walkways is needed for winter, then low height and light level bollard lighting would be preferable as bright security lighting would be of serious concern. Any lighting must be directed away from hedgerows and woodland, and lighting choice, if necessary, will be critical.'</i></p>	<p>The Lighting Impact Assessment prepared in support of the Application has concluded that, based on the installation of 3,000k external lighting sources within the Proposed Scheme, as a worst case scenario, lux levels along the woodland to the south of the Site will be below 1 lux. As a result, <i>'lighting is not anticipated to have a significant impact on any light-sensitive species'</i> utilising this habitat.</p>
	<p><i>'The scale of development proposed is such that any scheme should be exemplary in terms of integrating biodiversity features. The Wildlife Trusts have published 'Homes for People and Wildlife: How to build housing in a nature-friendly way' which sets out what a good, nature-rich housing development looks like. Green roofs can also provide valuable habitats for wildlife.'</i></p>	<p>The mitigation hierarchy has been used throughout the design of the Proposed Scheme, with habitats retained and enhanced wherever possible, with compensation and mitigation provided alongside this where required. This has resulted in the majority of the higher value habitats being retained, with open space positioned to</p>

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		<p>buffer these areas from the Proposed Scheme. Additional planting will provide further enhancements and mitigation for any unavoidable losses. Biodiversity features integrated into the Proposed Scheme will be designed with reference to CDC's '<i>Biodiversity in the Built Environment, Good Practice 1, Preservation of Existing Sites and Provision of Artificial Nesting Sites (September 2019)</i>'</p> <p>Overall, calculations have demonstrated the Proposed Scheme's capacity to deliver a net gain in biodiversity.</p>
National Highways (included in CDC's EIA Scoping Opinion)	<i>'In the absence of a Transport Assessment, no comments are given at this time.'</i>	No response required. A Transport Assessment has been submitted alongside the planning application.
Historic England (included in CDC's EIA Scoping Opinion)	<p><i>'This development could potentially have an impact upon a number of designated heritage assets and their settings in the area around the site. In line with the advice in the National Planning Policy Framework, the Environmental Statement should contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets.</i></p> <p><i>The Environmental Statement should also consider the potential impacts on non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place.'</i></p>	Chapter 6: Built Heritage and Archaeology includes the assessment of effects to designated heritage assets in the surrounding area (accounting for character and historic significance), and the area of archaeological potential in the north of the Site.

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OCC (included in CDC's EIA Scoping Opinion)	<p>Regarding Transport:</p> <p><i>'The development is forecasted to increase up to nearly 20% of vehicular trips along the B4100 Warwick Road during weekday PM peaks and up to 17.8% in the AM peak. Such levels of increase cannot be confidently classified as low and insignificant without a holistic view of how other non-car modes of travel are appraised.'</i></p>	<p>The resulting vehicle trip percentage increases on Warwick Road (B4100) have been based on the worst case scenario for vehicle trip generation impact by the Proposed Scheme. The Proposed Scheme will provide a number of pedestrian and cycle improvements that will promote the use of more sustainable modes of transport for future residents. These improvements are stated in the TA. A Travel Plan (TP) has also been prepared to accompany the TA. This proposes additional measures and proposed targets to encourage the use of more sustainable modes of transport. When applying this context to the percentages quoted, this provides further rationale that effects associated with vehicle trip percentage increases on Warwick Road (B4100) will not be significant.</p> <p>A broader report of transport effects is reported in the TA.</p>
	<p><i>'Driver Delay has been appraised by junction capacity tests that have been carried out at 'identified junctions', including the access junction. Whilst this approach is acceptable, without details of the proposed access junction it is not possible to review this exercise.'</i></p>	<p>Details of the proposed access junction are provided in the TA. This consists of a new access junction designed as a ghost island priority junction, in accordance with the relevant DMRB document CD 123 'Geometric design of at-grade priority and signal-controlled junctions'.</p>
	<p><i>'Pedestrian amenity has been identified to be marginally affected. In order to fully respond to this element, how the development will be accessed by non-motorised users will need to be reviewed and demonstrated through a Transport Assessment.'</i></p>	<p>The accessibility of the Site by pedestrians and cyclists has been appraised by the TA.</p> <p>Proposed pedestrian and cycling facilities will facilitate direct and convenient connections to Banbury from different points of access for non-motorised users.</p>

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		<p>The Proposed Scheme includes the provision of a 3.0m pedestrian/cycleway route that will provide access to Warwick Road (B4100) from the western Site boundary, and will be connected to Banbury to the south.</p> <p>The Proposed Scheme will also provide additional pedestrian routes by improving the PRowS that cross the Site and connect to Banbury via Dukes Meadow Drive and Hanwell Fields. These improvements could comprise:</p> <ul style="list-style-type: none"> • Footpath 191/6/30, which crosses the site and leads south to Footpath 120/116/10, which connects to the pedestrian/cycleway route along Warwick Road; and • Footpath 239/7/20, which runs by the eastern site boundary and leads east to Footpath 120/107/10, which connects to the pedestrian and cycle facilities along Dukes Meadow Drive.
	<p><i>'The EIA should include public rights of way and publicly accessible routes and green space as part of the traffic and transport assessment – although the assessment and impact criteria will be different. The development site offers the opportunity to create a new route around the site as mitigation and also to enhance the quality and attractiveness of the development.'</i></p>	<p>As set out in Chapter 4: Development Specification, the Proposed Scheme will retain and enhance/protect PRowS 191/6/30 and 239/7/20 which lie within and adjacent to the Site respectively.</p>
	<p><i>'Methodology – The Transport and Access chapter appended to the EIA Scoping Report appears to define the severity of 'effect' purely according to percentage increase in traffic flows. The significance of the development's impact on delay and amenity will also depend on the baseline flows and characteristics of the infrastructure provided; for</i></p>	<p>The appraisal of Transport and Access effects made in the EIA Scoping Report (Appendix 2.1) was informed by the assessment criteria and methodology set out by the IEA Guidelines for the Environmental Assessment of Road Traffic³.</p>

³ IEA Guidelines for the Environmental Assessment of Road Traffic (1993).

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	<p><i>example, a link which experiences high traffic flows may be more susceptible to delays at junctions with a low percentage increase of additional traffic (for instance a 5% increase) and this could have a more significant impact on delay and amenity than which may be the case for a very quiet road experiencing 100% increase in traffic flows. The methodology also provides no information on how the effect of severance would be assessed.</i></p> <p><i>Currently the scoping note includes limited information about the methodology and content of the TA to accompany a planning application. This will need to be updated as the detail is determined. Whilst the TA will consider the impact of traffic generated by the development during agreed peak periods, the EIA is obliged to assess the impacts of total traffic across the day. There is no acknowledgement of this in the scoping note.</i></p> <p><i>A Construction Traffic Management Plan will also be required with the application.</i></p> <p><i>Having regard to the above, it is considered that Transport and Access should be scoped into the ES.'</i></p>	<p>The percentage change in traffic flows inherently accounts for the baseline conditions of the road, whereby a greater percentage change in flows would cause a greater effect to sensitive receptors.</p> <p>The assessment of capacity at selected junctions located to the south of the Site, and where a greater impact from the Proposed Scheme would be expected, has shown that this impact is marginal in all cases. This confirms, together with the ATC traffic count undertaken on Warwick Road (B4100) and included within the TA, that Warwick Road (B4100) does not experience high traffic flows and impacts on delay and amenity are not significant.</p> <p>The IEMA Guidance defines severance as “<i>the perceived division that can occur within a community when it becomes separated by a major traffic artery.</i>” Warwick Road (B4100) is an existing road with no pedestrian facilities provided on either direction by the section of highway bounding the Site. The development on the opposite side of Warwick Road (B4100) is located to the south (Drayton Lodge) and is conveniently accessed by a pedestrian crossing that leads to Hanwell Fields and will be connected to the Site. It is therefore considered that any impact on the community is negligible and not significant.</p> <p>The scope and methodology of the TA sit outside of the remit of EIA. Further detail on this is provided by the TA.</p>

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		<p>The appraisal of Transport and Access effects made in the EIA Scoping Report (Appendix 2.1) was informed by peak period flows to represent the worst case scenario and deliver a robust assessment. Changes in traffic flows in non-peak hours would be smaller and result in reduced effects to receptors across a 24-hour period.</p> <p>Accounting for the above, Transport and Access has been scoped out of the ES.</p>
	<p>Regarding Drainage: <i>'Clarify the phasing of the development, will the drainage be implemented under one phase? Should the site consist of more than one phase, a phasing plan needs to be provided.'</i></p>	<p>The Drainage Strategy for the Proposed Scheme is anticipated to be constructed in one phase.</p>
	<p>Regarding Archaeology: <i>'The site is in an area of archaeological interest and potential, which informed our initial advice for a predetermined trenched evaluation. This evaluation was undertaken by Worcestershire Archaeology over the summer of 2022, and although the final report has not yet been submitted for comment, the trenching and geophysical survey showed that the site contains a number of large enclosures dating to the Iron Age and Roman period, as well as a number of pit alignments and clusters. A further phase of archaeological evaluation will be required prior to development.'</i></p>	<p>Further archaeological investigations have been undertaken at the Site. The results of this surveying are detailed in Appendix 6.3: Archaeological Evaluation, with an assessment of likely significant effects made in Chapter 6: Built Heritage and Archaeology.</p>
	<p><i>'The EIA needs to include consideration of travel patterns from the development to local schools. This is likely to include William Morris Primary School (and possibly Hardwick Primary School) for primary age pupils and north Oxfordshire academy for secondary age pupils.'</i></p>	<p>The TA has considered the distance and walking journey times from the Site to local facilities, including schools. As set out in the TA, the Site is approximately 2km (25 minutes' walking time/11 minutes' cycling time) from William Morris Primary School and approximately 1.4km</p>

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	<p><i>It should be noted that demand and supply of school [laces [places] in this area is going through a period of rapid change, and will continue to do so in response to planned housing developments, including this one.</i></p> <p><i>Having regard to the above comments, and its relationship with travel patterns/transport, it is considered that this should be scoped into the ES.'</i></p>	<p>(17 minutes' walking time/7 minutes' cycling time) from the North Oxfordshire Academy.</p> <p>These schools are within the 2km walking distance identified as suitable for replacing car trips by the Manual for Streets⁵, meaning that residents of the Proposed Scheme will be able to access local schools via active travel methods, instead of vehicles.</p>
<p>CDC (included in their EIA Scoping Opinion)</p>	<p>Regarding Flood Risk and Drainage (in the absence of comments from EA):</p> <p><i>'The site exceeds 1ha in size and a Flood Risk Assessment will therefore be required.</i></p> <p><i>A surface water drainage scheme for the site will be required based on sustainable drainage principles together with an assessment of the hydrological and hydro-geological context of the development.</i></p> <p><i>I note that flood risk and drainage have been scoped out of the ES, and subject to no comments to the contrary from the Environment Agency, this is agreed.'</i></p> <p>Regarding Landscape (in the absence of comments from the Landscape Officer):</p> <p><i>'The ES should refer to relevant National Character Area and include a full assessment of the potential impacts of the development on local landscape character using the methodology' set out in the Guidelines for Landscape and Visual Impact Assessment 2013 produced by the Landscape Institute and the Institute of Environmental Assessment and Management. The assessment should also include the cumulative effect of the development with other relevant or proposed developments in the area.</i></p>	<p>A Flood Risk Assessment and Drainage Strategy has been prepared in support of the Application.</p> <p>Chapter 7: Landscape and Visual assesses the construction and operational effects of the Proposed Scheme on local landscape character, referring to the methodology set out in GLVIA3.</p> <p>Chapter 8: Assessment of Cumulative Effects includes the assessment of landscape and visual effects in-combination with appropriately identified developments (Approved Projects) within the surrounding area.</p> <p>As set out within Chapter 4: Development Specification and Chapter 7: Landscape and Visual, the Proposed</p>

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	<p><i>To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and wherever possible use local materials. The ES should set out the measures to be taken to ensure that development will deliver a high standard of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with justification of the selected option in terms of landscape impact and benefit.'</i></p>	<p>Scheme will deliver high quality dwellings and green infrastructure that is designed to assimilate its built form into the surrounding environment and enhance the accessibility of the Site for public benefit.</p>
	<p>Regarding Biodiversity (in the absence of comments from the Ecology Officer):</p> <p><i>'...having regard to the comments of BBOWT and Natural England above, it is considered that ecology and biodiversity should be scoped into the ES.'</i></p> <p><i>'There are however several existing trees and hedgerows within the site and along its boundaries. A full tree and hedgerow survey must therefore be carried out together with an Arboricultural Assessment. As advised by Natural England, the ES should assess the impacts of the proposal on any ancient woodland, ancient and veteran trees and the scope to avoid and mitigate adverse impacts. It should also consider opportunities for enhancement.</i></p> <p><i>This should be scoped into the ES for completion as it is also relevant to landscape impact and biodiversity considerations.'</i></p>	<p>For the reasons outlined in response to the NE and BBOWT consultation above, with justification given in the EIA Scoping Report (Appendix 2.1) and its appended Ecological Appraisal (Appendix 6 of Appendix 2.1), Biodiversity has been scoped out of the ES.</p> <p>An ecological assessment of the hedgerows was completed in line with the Wildlife and Landscape criteria provided in Part II of Schedule 1 of the Hedgerows Regulations 1997. This identified that hedgerows at the northern boundary of Parcel A, and between Parcels A and B flanking Gullicote Lane (H1, H3 and H5 as identified in the Ecological Appraisal) meet sufficient criteria to be considered 'important' and as such will be retained and buffered from development zones and enhanced with proposed planting (Chapter 4: Development Specification and Volume 3: Environmental Management Plan).</p>
	<p>Regarding Built Heritage and Archaeology (in the absence of comments from the Conservation Officer):</p>	<p>As highlighted above, Chapter 6: Built Heritage and Archaeology includes the assessment of effects to</p>

Consultee	Summary of Scoping Comment	How / Where the Comment Has Been Addressed
	<p><i>'...having regard to the comments of Historic England and the proximity of the site to Hanwell Conservation Area and proximity to listed buildings, and having regard also to the fact that the site lies within an area of archaeological potential, it is agreed that built heritage and archaeology are scoped into the ES.'</i></p> <hr/> <p>Regarding Lighting: <i>'It is noted that lighting has been scoped out of the ES. However, it is likely that lighting from the proposed development will have significant impact on the open countryside, the ecological value of the site and the Hanwell Observatory. The ES should therefore assess the impact of lighting, both during the construction phases and operational phase of the development and scoped in accordingly.'</i></p>	<p>designated heritage assets in the surrounding area (accounting for character and historic significance), and the area of archaeological potential in the north of the Site.</p> <hr/> <p>As set out in Chapter 4: Development Specification, justified in the EIA Scoping Report (Appendix 2.1) and assessed by the Lighting Assessment prepared in support of the Application, the Proposed Scheme's lighting strategy will include measures to prevent sky glow and maintain dark bat commuting corridors in the Site's boundary woodland.</p> <p>The Lighting Assessment submitted in support of the Application made a quantitative assessment of the upward lighting ratio and upward flux ratios (both determinants of sky glow) of the Proposed Scheme's outline lighting strategy. The model predicted a sky glow figure of 0.0% (where the limit for Environmental Zone E2, in which the Site is classified, is 2.5%). The upward flux ratio for the Proposed Scheme is 3.5%, where the limit for Environmental Zone E2 is 5%.</p> <p>With consideration of these calculations, in addition to adherence to measures set out in Guidance Note 08/18 Bats and Artificial lighting in the UK ILP 2018 and the Institute of Lighting Practitioners' (ILP's) Guidance Note 01/21 for the reduction of Obtrusive Light, the Proposed Scheme is not anticipated to cause significant effects to</p>

Consultee	Summary of Scoping Comment	How / Where the Comment Has Been Addressed
		either Hanwell Observatory or bats. As such, effects related to obtrusive lighting have been scoped out of the ES.
	<p>Regarding Noise:</p> <p><i>'Paragraph 5.119 of the Scoping Report references a noise impact assessment that has not been provided with this application. However, it is considered that noise can be dealt with outside the EIA provided that the Noise Impact Assessment is provided with any subsequent planning application.'</i></p>	Noise and Vibration has been scoped out of the ES, therefore no response is required.
	<p>Regarding Contaminated Land:</p> <p><i>'Having assessed the Phase 1 report provided, it is accepted that contaminated land can be scoped out of the EIA and that a Phase 2 report is provided with any subsequent planning application for the site.'</i></p>	A Phase II report will be provided as part of any reserved matters application following planning approval.
	<p>Regarding Air Quality:</p> <p><i>'having read the accompanying report, it is accepted that air quality can be scoped out of the EIA and considered though the application submission.'</i></p>	Air Quality has been scoped out of the ES, therefore no response is required.
	<p>Other matters:</p> <p><i>'It is agreed that agricultural land and soil, socio-economic (excluding education) and human health, climate change, microclimate, waste and resources and risk of major accidents and/or disasters can be scoped out of the ES.'</i></p>	These topics have been scoped out of the ES, therefore no response is required.
	<p>Regarding Cumulative and In-Combination Effects:</p> <p><i>'This report [The EIA Scoping Report (Appendix 2.1)], however, only seeks to consider development within 1km of the site. It is likely that in order for the ES to be robust in its content, that other developments in and around</i></p>	The four schemes mentioned have been included as Approved Projects 2 – 5, as appraised in Chapter 8: Assessment of Cumulative Effects .

Consultee	Summary of Scoping Comment	How / Where the Comment Has Been Addressed
	<p><i>Banbury will also need to be considered, including those developments which are currently under construction immediately adjacent to and within very close proximity to this site at Hanwell Fields and Warwick Road. There are also current applications for further development at Hanwell Fields (21/03426/OUT & 22/003064/OUT refer). There are also a number of current planning applications adjacent to Junction 11 of the M40 which may impact cumulatively and must also be considered (21/02467/F & 22/01488/OUT refer).'</i></p>	

Technical Topics ‘Scoped In’

2.8 The following technical topics and associated likely significant environmental effects have been taken forward within the EIA and are reported within this ES:

- Built Heritage and Archaeology (**Chapter 6**); and
- Landscape and Visual (**Chapter 7**).

2.9 The likely significant environmental effects considered within each technical topic are detailed within **Technical Chapters 6 and 7**.

Technical Topics ‘Scoped Out’

2.10 As part of the EIA process, there are technical topics for which no likely significant environmental effects have been identified and therefore these technical topics have been ‘scoped out’ of the EIA.

2.11 The following technical topics were agreed to be ‘scoped out’ as part of the Scoping Opinion (**Appendix 2.2**)

- Agricultural land and soils;
- Ground conditions;
- Water resources, flood risk and drainage;
- Transport and access;
- Air quality;
- Noise and vibration;
- Biodiversity;
- Socio-economics and human health;
- Climate change;
- Obtrusive lighting;
- Microclimate (daylight, sunlight and overshadowing and wind microclimate);
- Waste and resources; and
- Risk of major accidents and/or disasters.

2.12 Mitigation that has informed the evidence base to ‘scope out’ the above technical topics (including that outlined in the EIA Scoping Report (**Appendix 2.1**)) is provided within **Chapter 4: Development Specification** and **Volume 3: Environmental Management Plan**.

Technical Consultation and Stakeholder Engagement

2.13 In addition to the EIA Scoping exercise, the project team have undertaken technical consultation, where appropriate, with consultees to inform the scope, assessment methodology and approach and (in some instances) the outputs of baseline studies / surveys. The specifics of technical consultation are reported within **Technical Chapters 6 and 7**.

2.14 A pre-application programme of stakeholder engagement has also been undertaken, which included engagement with officers at CDC. This engagement has enabled the

project team to build an understanding of the local context and raise awareness of the Proposed Scheme.

- 2.15 Public consultation has also been undertaken. A range of communication methods have been used, including:
- The launch of a project website, which included, detailed proposals, a feedback facility and alternative contact details (telephone and email);
 - A consultation leaflet, distributed to 543 properties surrounding the Site in Hanwell and Banbury;
 - Publishing of proposals in local newspaper, the Banbury Guardian; and
 - Posting of details of the pre-application consultation process on local social media channels to encourage feedback.
- 2.16 Consultation was also sought with OCC and CDC councillors, Hanwell Parish Council, Banbury Town Council and Drayton Parish Council, with details of the proposals disseminated alongside an offer of a briefing to discuss the proposals. A briefing was held with Hanwell Parish Council, with feedback received.
- 2.17 Further information on stakeholder engagement is provided within the **Statement of Community Engagement**.

Approach to the Assessment of Likely Significant Effects

Overview

- 2.18 This section sets out the overarching approach adopted for the assessment of likely significant effects within this ES.
- 2.19 The exact methodology for the assessment of likely significant effects arising from the Proposed Scheme during the construction (inclusive of site preparation, earthworks and construction works) and operational stages varies across each of the technical topics considered within the EIA, largely due to technical specific guidance and best practice. Therefore, **Technical Chapters 6 and 7** set out the specific technical topic assessment approach and methodology.

Approach to Boundaries

- 2.20 The boundary upon which baseline data has been collected (i.e. study area) varies between the technical topics in this ES. The study area for each topic is reported within the **Technical Chapters 6 and 7**. However, all study areas include the Site boundary, as defined in **Figure 1.1**. This represents the maximum extent of development and associated temporary and permanent works for which permission will be sought and is consistent with the Application boundary.

Baseline Conditions

- 2.21 Schedule 4, Paragraph 3 of the EIA Regulations states that an ES should include:

‘a description of the relevant aspects of the current state of the environment (baseline scenario)...’

- 2.22 The baseline environment of the Site and relevant technical study areas have been established based upon:
- Site visits and surveys;
 - Desk-based studies;
 - Review of existing site-specific information or public literature;
 - Modelling;
 - Review of relevant national and local planning policies; and
 - Consultation with relevant stakeholders.
- 2.23 Likely significant effects as a result of the Proposed Scheme have been described in this ES in relation to the deviation from the current / existing baseline environment.
- 2.24 Baseline conditions have been based upon surveys / studies completed or data accessed between 2022 and 2023. The baseline conditions within the Site and surrounding area have largely remained unchanged during this time.
- 2.25 The origin and dates of all third party data are clearly outlined within the relevant **Technical Chapters 6 and 7**, alongside any limitations or assumptions.

Future Baseline

- 2.26 Schedule 4, Paragraph 3 of the EIA Regulations states that an ES should include:
- ‘...an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of availability of environmental information and scientific knowledge.’*
- 2.27 The ES reports a ‘do nothing’ scenario in **Chapter 5: Consideration of Alternatives**, which considers how the Site and relevant technical study areas may change assuming the Site was not developed and the existing land uses / management regime was maintained.
- 2.28 The future baseline scenario is also outlined within **Technical Chapters 6 and 7**, which focuses on the future conditions accounting for natural changes to the existing conditions.
- 2.29 As noted above, likely significant effects as a result of the Proposed Scheme have been described in this ES in relation to the deviation from the current / existing baseline environment.

Identification of Sensitive Receptors

- 2.30 Schedule 4, Paragraph 4 of the EIA Regulations states that an ES should include:

‘a description of the factors specified in Regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora); land (for example land-take), soil, (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.’

- 2.31 Consistent with the EIA Regulations, the aspects of the environment likely to be significantly affected by the Proposed Scheme have been identified and set out within the ‘Sensitive Receptors’ section of **Technical Chapters 6 and 7**.
- 2.32 A summary of sensitive receptors identified within **Technical Chapters 6 and 7** is also contained within **Chapter 3: Site Context**.

Information to Inform Assessment

- 2.33 As noted in **Chapter 1: Introduction**, the Application is in outline (with all matters reserved except for access).
- 2.34 The ES is required to provide sufficient information about the Proposed Scheme to meet the requirements of the EIA Regulations and to ensure that CDC can reasonably be satisfied that they have adequate information to decide that they have full knowledge of the likely significant environmental effects of the Proposed Scheme.
- 2.35 The level of information required to inform a robust assessment of likely significant environmental effects is provided in **Chapter 4: Development Specification**. This is to be read in conjunction with the following plans:
- **Figure 4.1 Parameter Plan**; and
 - **Figure 4.2: Illustrative Landscape Strategy**.
- 2.36 The technical assessments undertaken as part of the EIA and reported in the ES are based on the above.
- 2.37 It is important to note that it is not necessary to test every conceivable iteration of a development if a sufficiently robust envelope of effects has been identified and tested. This approach allows for the Proposed Scheme to evolve within the approved parameters, with future detailed design controlled through planning conditions.

Assessment Scenarios

- 2.38 In accordance with the EIA Regulations, the likely significant effects associated with both the construction (which, as noted above, is inclusive of site preparation, earthworks and construction works) and operational stages of the Proposed Scheme have been identified and assessed.
- 2.39 The following key scenarios have been assessed within the EIA and reported in the ES:
- **Construction: 2024**; and
 - **Operation: 2028**.

Implementation of Mitigation and Monitoring

2.40 Schedule 4, Paragraph 7 of the EIA Regulations states that an ES should include:

‘a description of the measures to avoid, prevent, reduce, or if possible offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover construction and operational phases.’

2.41 Regulation 26 states that when determining an application consideration should be given to *‘whether it is appropriate to impose monitoring measures’* including the parameters to be monitored and the duration of the monitoring.

2.42 In accordance with IEMA guidance and the EIA Scoping Report (**Appendix 2.1**), the following three types of mitigation have been identified and used within this ES:

- **Primary mitigation:** Modifications to the location or design of the Proposed Scheme or measures specifically included in the design of the Proposed Scheme to mitigate a known issue and are therefore an inherent part of the project;
- **Secondary mitigation:** Actions that will require further activity in order to achieve the anticipated outcome; and
- **Tertiary mitigation:** Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

2.43 **Technical Chapters 6 and 7** have considered and defined relevant primary and tertiary mitigation for both the construction and operational stages prior to undertaking the assessment of likely significant effects. Following the conclusion of effects based on the Proposed Scheme (inclusive of primary and tertiary mitigation), any further mitigation or enhancement measures (inclusive of any monitoring arrangements) have been identified under the ‘Secondary Mitigation or Enhancement’ section for each likely significant effect in **Technical Chapters 6 and 7**.

2.44 The primary, tertiary and secondary mitigation detailed within **Chapter 4: Development Specification**, the EIA Scoping Report (**Appendix 2.1**) and **Technical Chapters 6 and 7** are summarised within **Volume 3: Environmental Management Plan**.

Determining Level of Effect and Significance Criteria

2.45 A four-step approach has been adopted to define effects as outlined below.

2.46 The method for assessing the level of effect has varied between technical topics but in principle has been based on:

- The environmental sensitivity (or value / importance etc., as appropriate to the technical topic) of a receptor, including aspects such as adaptability, tolerance or recoverability; and

- The magnitude of change from the baseline conditions, including aspects such as probability / likelihood of occurrence, geographical extent, complexity, duration (short – up to 1 year, medium – 1 to 10 years, or long-term – over 10 years), frequency and reversibility (i.e. temporary or permanent).
- 2.47 Sensitivity (or value/importance etc.) of a receptor has been assessed on a scale of high, medium, low and negligible and magnitude of change has been assessed on a scale of large, medium, small and negligible. Where deviation from these scales is required to meet specific technical guidance this is outlined, where relevant, in **Technical Chapters 6 and 7**.
- 2.48 Other factors such as feedback from stakeholders, relevant legislation, international, national, regional and local standards / guidance and the inter-relationship between effects (both cumulatively and in terms of potential effect interactions) have also been considered, where appropriate.
- 2.49 The assignment of the level of effect has been based on professional judgement and the matrix below (**Table 2.2**) is intended to be a tool to assist with this process. Whilst the matrix provides ranges this is to guide the competent expert and therefore a definitive level of effect is concluded, wherever possible.

Table 2.2: Matrix to support determining the level of effect

		Sensitivity (or value / importance etc.)			
		High	Medium	Low	Negligible
Magnitude of change	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

- 2.50 The following terms have been used to define the level of effect identified and these can be ‘beneficial’ or ‘adverse’:
- **Major effect:** Where the Proposed Scheme is likely to cause a considerable change from the baseline conditions and the receptor has limited adaptability, tolerance or recoverability or is of the highest sensitivity. This effect is considered to be ‘Significant’;
 - **Moderate effect:** Where the Proposed Scheme is likely to cause either a considerable change from the baseline conditions at a receptor which has a degree of adaptability, tolerance or recoverability or a less than considerable change at a receptor that has limited adaptability, tolerance or recoverability. This effect is considered more likely to be ‘Significant’ but will be subject to professional judgement;

- **Minor effect:** Where the Proposed Scheme is likely to cause a small, but noticeable change from the baseline conditions on a receptor which has limited adaptability, tolerance or recoverability or is of the highest sensitivity or a considerable change from the baseline conditions at a receptor which can adapt, is tolerant of the change and / or can recover from the change. This effect is considered less likely to be ‘Significant’ but will be subject to professional judgement; and
- **Negligible:** Where the Proposed Scheme is unlikely to cause a noticeable change at a receptor, despite its level of sensitivity or there is a considerable change at a receptor which is not considered sensitive to a change. This effect is ‘Not Significant’.

- 2.51 A conclusion has then been provided as to whether the effect is ‘Significant’ or ‘Not Significant’ based on professional judgement.
- 2.52 Where a technical specific assessment methodology has been applied which uses differing criteria / terminology to that above, the concluding assessment of the level of effect and significance has been aligned with the above in order to provide continuity across the entire EIA whilst aligning with technical guidance and best practice. This ensures that the conclusions of the different effects can be compared during the decision making process and robustly considered within the cumulative assessment. The assessment methodology adopted is clearly set out within **Technical Chapters 6 and 7**.
- 2.53 **Technical Chapters 6 and 7** include a summary of effects table, which outlines the effects assessed and associated sensitive receptors, residual effects and whether the effect is ‘Significant’ or ‘Not Significant’.

Limitations and Assumptions

- 2.54 Schedule 4, Paragraph 6 of the EIA Regulations state that an ES should include:
- ‘...details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the require information and the main uncertainties involved.’*
- 2.55 Where the technical assessments presented in **Technical Chapters 6 and 7** have experienced limitations or are based on assumptions, these have been clearly identified.

References

¹ Town and Country Planning (EIA) Regulations 2017 Statutory Instrument 2017 No. 571 (as amended).

² Ministry of Housing, Communities and Local Government [Online] Planning Practice Guidance Available at: <https://www.gov.uk/government/collections/planning-practice-guidance>.

³ IEMA (2015) Environmental Impact Assessment Guide to: Shaping Quality Development.

⁴ IEMA (2016) Environmental Impact Assessment Guide to: Delivering Quality Development.

⁵ Department for Transport (2007). Manual for Streets. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1072722/Essex_Manual_for_Streets_Redacted.pdf [Accessed 18/01/2023].